

AMENDMENTS TO THE CLAIMS

The listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A glazing panel system providing light transmission therethrough comprising:

- a first glazing panel of plastic;
- an upstanding seam flange on an end of the glazing panel and being joined to the first glazing panel;

- a first end on the first glazing panel;
- a second glazing panel of plastic;
- a first end on the second glazing panel;
- an upstanding seam flange being joined to the first end of the second glazing panel;

- a retention clip being disposed between adjacent first ends of the first and second glazing panels and being adjacent their respective upstanding seam flanges, the retention clip having a portion configured to engage and to retain the adjacent glazing panels against a support member under high wind loads;

- an internal connector ~~connected to~~ loosely engaging the glazing panels ~~configured to allow expansion and contraction of the glazing panels due to temperature and normal wind load conditions and to provide an inwardly directed force to retain to assist the retention clip in the retention of the glazing panels against separation from the retention clip~~ under high wind loads; and

- ~~a second covering an external~~ connector configured to cover the internal connector, the upper portion of the clip and the upstanding ~~seams~~ seam flanges, the

external connector flexing to allow expansion and contraction of the glazing panels due to temperature and normal wind load conditions and ~~and being connected substantially~~ sealingly engaging to the glazing panels to provide substantial waterproof protection to the covered internal connector, upper portion of the clip and upstanding seam flanges, wherein the retention clip, internal connector, and external connector are three discrete and separable bodies, the internal connector engages the upstanding seam flanges and covers the seam defined therebetween, and the external connector is not in engagement with the upstanding seam flanges.

2. (Previously presented) A glazing panel system in accordance with Claim 1 wherein the internal and external connectors are inverted, substantially U-channels in shape.

3. (Original) A glazing panel system in accordance with Claim 2 wherein the glazing panels having first and second spaced tooth surfaces thereon; and the internal and external connectors have toothed surfaces thereon for engagement with the tooth surfaces on the glazing panels.

4. (Original) A glazing panel system in accordance with Claim 3 wherein the internal and external connectors are flexible to expand over the tooth surfaces and then to contract to interlock with the toothed surfaces on the glazing panels.

5. (Original) A glazing panel system in accordance with Claim 1 wherein the toothed surfaces are spaced from one another in a horizontal direction.

6. (Previously presented) A glazing panel system in accordance with Claim 1 wherein the internal connector is less flexible than the flexible external connector with

respect to retaining the glazing panels together under high loads applied to the glazing panels.

7. (Currently amended) A glazing panel system in accordance with Claim 1 wherein the external connector has a tighter engagement with the glazing panels to provide waterproof seams covering between adjacent panels than a looser engagement by the internal connector with the upstanding seam flanges.

8. (Currently amended) A glazing panel system in accordance with Claim 7 wherein the internal connector has a predetermined tolerance with respect to the upstanding seam flanges to allow expansion and contraction of the seam flanges.

9. (Currently amended) A glazing panel system in accordance with Claim 7 wherein the external connector is more flexible than ~~the internal connectors~~ connector to allow expansion of the seam flanges with flexing of the glazing panels.

10. (Previously presented) A glazing panel system in accordance with Claim 1 wherein the retention clip engages the glazing panel seam flanges at a position below the top ends of the upstanding seam flanges.

11. (Currently amended) A glazing panel system in accordance with Claim 10 wherein each of the glazing panels has a pair of spaced upstanding seam portions; and the internal connector is an inverted channel having depending legs positioned between the respective upstanding seam portions.

12. (Previously presented) A glazing panel system in accordance with Claim 1 wherein the retention clip engages the upstanding glazing panel seam flanges at a

position located below a top end on the upstanding seam flanges to provide an improved retention of adjacent glazing panels against separation.

13. (Cancelled)

14. (Currently Amended) A glazing panel system providing light transmission therethrough comprising:

- a first glazing panel of plastic;

- a pair of inner and outer upstanding seam flanges on an end of the glazing panel and each of the pair being joined to the first glazing panel;

- a first end on the first glazing panel;

- a second glazing panel of plastic;

- a first end on the second glazing panel;

- a pair of inner and outer upstanding seam flanges, each of the pair being joined respectively to the first end of the second glazing panel and projecting upwardly to a top end thereon;

- a retention clip being disposed between adjacent first ends of the first and second glazing panels and being adjacent their respective upstanding seam flanges;

- a base on the retention clip for being secured to a support member for the glazing panels;

- a web portion on the clip extending upwardly from the clip base and extending between the adjacent first ends of the first and second glazing panels;

- a seam covering member engaging the pair of outer seam flanges and covering both pairs of a seam between adjacent seam flanges-inner and outer seam flanges; and

- a portion on the retention clip extending transversely from the clip web and spaced upwardly of the clip base and for engaging the respective inner seam flanges of

the first and second glazing panels at locations lower than the top ends of the outer upstanding seam flanges when resisting uplift loads.

15. (Original) A glazing panel system in accordance with Claim 14 comprising:
an internal connector connected to the seam flanges and covered by the seam covering member.

16-24. (Cancelled)

25. (Original) A panel system in accordance with Claim 14 comprising a retention clip having a web extending upwardly between the seam flanges and having a top flange portion extending over the top ends of the respective seam flanges.

26-28. (Cancelled)

29. (Original) A glazing panel system in accordance with Claim 14 wherein the retention clip is made of extruded metal.

30. (Original) A glazing panel system in accordance with Claim 14 wherein the retention clip is formed of a bent piece of sheet metal.

31-43. (Cancelled)

44. (Currently Amended) An extruded, modular, light transmitting plastic architectural panel comprising:
two outer major surfaces located on opposite sides of the architectural panel;
a first end on the panel having an end wall;

~~a pair of an~~ inner and an outer upstanding seam flanges at the first end of the plastic glazing panels for being interconnected with ~~a pair of an~~ inner and an outer seam flange of another extruded plastic panel;

clip engaging portions on the panel for engaging a retention clip to hold the panel against separation from another panel;

first interlocks on the upstanding inner seam flanges facing away from the end wall and configured to interlock ~~for interlocking~~ with an first internal connector; and

second interlocks on the upstanding outer seam flanges facing away from the ~~vertical end wall and are~~ configured to interlock ~~for interlocking~~ with an external connector superimposed over the internal connector.

45. (Currently Amended) An architectural glazing panel in accordance with Claim 44 wherein the first and second interlocks comprise:

stepped surfaces on each of the upstanding seam flanges positioned at spaced locations to interlock with stepped surfaces on the ~~first and second internal and external~~ connector; and

the stepped surfaces on the first interlocks for the internal connector being located at a height different than the stepped surfaces for the second interlocks for the external connector.

46. (Currently amended) A glazing panel ~~and retention clip~~ in accordance with Claim 45 in which the stepped surfaces are positioned at horizontal spaced locations relative to an adjacent end of the glazing panel.

47-72. (Cancelled)

73. (Original) A glazing panel in accordance with Claim 44 wherein the panel is made of extruded polycarbonate plastic.

74. (Previously presented) A glazing panel system in accordance with Claim 1 wherein each of the panels is made of extruded polycarbonate plastic.

75. (Previously presented) A glazing panel system in accordance with Claim 1 wherein the retention clip comprises a laterally extending flange configured to retain the glazing panels.

76. (Previously presented) A glazing panel system in accordance with Claim 1 wherein each of the glazing panels has a second upstanding seam flange in engagement with the retention clip.

77. (Previously presented) A glazing panel system in accordance with Claim 1 wherein the retention clip engages the glazing panels at a location lower than the connection of the internal connector and the covering connector.

78. (Previously presented) The glazing panel system of Claim 1 wherein the internal connector is superimposed over the clip and applies substantial retention force to the seam flanges.

79. (Previously presented) The glazing panel system of Claim 78 comprising:
a top flange on the clip extending over upper ends of the upstanding seam flanges; and
the internal connector being configured to cover the top flange of the clip.

80. (Currently amended) A glazing panel system in accordance with Claim 1 comprising:

first and second upstanding seam flanges each joined at its lower end to the first end ~~to~~of each of the first and second glazing panels; and

the internal connector being connected to the first upstanding seam flanges and the second covering connector being connected to the second seam flanges.

81. (Previously presented) A glazing panel system in accordance with Claim 80 wherein the internal connector is superimposed over the clip and first upstanding seam flanges and the second covering connector is superimposed over the internal connector and the first and second upstanding seam flanges.

82. (Previously presented) A glazing panel system in accordance with Claim 80 comprising:

the clip engaging the first seam flanges at a location lower than a top surface of the second upstanding seam flange to lower a hinge point between the first and second glazing panels.

83. (Previously presented) A glazing panel system in accordance with Claim 80 comprising:

each of the glazing panels having a top sheet surface; and

the clip configured to engage the first seam flanges adjacent the respective top sheet surfaces to lower a hinge point between adjacent glazing panels.

84. (Previously presented) A glazing panel system in accordance with Claim 1 wherein the external connector is made of plastic and the internal connector is made of metal, the internal connector being stronger than the external connector to provide

strength against panel hinging and the outer connector providing a weather-proof covering over the internal connector, clip and seam between the glazing panels.

85. (Previously presented) A glazing panel system in accordance with Claim 14 comprising:

an internal connector connected to the pair of inner seam flanges and configured to assist the clip in the retention of the glazing panels and being superimposed over the clip, the seam covering member superimposed over the internal connector, the clip and a seam between the panels.

86. (Previously presented) A glazing panel system in accordance with Claim 15 wherein the inner upstanding seam flanges have a top surface which is located lower than a top surface on the outer seam flange.

87. (Previously presented) A glazing panel system in accordance with Claim 15 wherein the internal connector is made of metal and the seam covering member is made of plastic;

the internal connector being stronger than the seam covering member for resisting uplift loads trying to pivot the glazing panels about a hinge point.

88. (Currently amended) A glazing panel in accordance with Claim 44 wherein the first interlocks for connection to the internal connector are at a height lower than the height of the second interlocks for the external connector.

89. (Previously presented) A glazing panel in accordance with Claim 44 comprising:

a clip engaging surface on the upper portion of the internal upstanding seam flange configured to engage the clip at a location lower than a top of the outer upstanding seam flange to lower a hinge point for the glazing panel and the clip.

90. (Currently amended) A glazing panel system providing light transmission therethrough comprising:

- a first glazing panel of plastic;

- first and second upstanding seam flanges on an end of the glazing panel and being joined at the respective lower ends to the first glazing panel;

- a first end on the first glazing panel;

- a second glazing panel of plastic;

- a first end on the second glazing panel;

- first and second seam flanges joined at their respective lower ends to the second glazing panel;

- a retainer clip disposed between the first ends of the respective glazing panels and to apply a retention force to retain the glazing panels against uplift load;

- an internal channel connector having an inverted U-shape superimposed over the clip and configured to engage the first upstanding seam flanges and to retain the glazing panels against uplift loads; and

- an external channel connector having an inverted, substantially U-shape superimposed over the clip and the internal channel connector and disposed in engagement with the second upstanding seam flanges on the respective glazing panels and covering the clip, the internal channel connector, the first and second seam flanges on the first and second glazing panels, and a seam between the connected glazing panels.

91. (Previously presented) A glazing panel system in accordance with Claim 90 wherein the internal connector is made of metal and is stronger in its resistance to uplift loads than the external connector.

92. (Previously presented) A glazing panel system in accordance with Claim 90 wherein the first upstanding seam flanges have a lower height than the second upstanding seam flanges.

93. (Previously presented) A glazing panel system in accordance with Claim 90 wherein the clip engages the first upstanding seam flanges at locations lower than the upper ends of the second upstanding seam flanges to lower a hinging point between adjacent glazing panels.

94. (Currently amended) An extruded, modular, light transmitting plastic architectural panel comprising:

- an architectural glazing panel of plastic having a body;
- upper and lower major sheet surfaces located on opposite sides of the body of the architectural glazing panel;

- a first end on the architectural panel;

- a pair of inner and outer upstanding seam flanges at the first end of the glazing panel for being interconnected with a pair of inner and outer seam flanges of another plastic panel;

- clip engaging portions on the glazing panel for engaging a retention clip to hold the panel against separation from another panel;

- the inner upstanding seam flange having a shorter height than the height of the upstanding outer seam flange;

interlocks on the shorter upstanding inner seam flanges configured to interlock with an internal connector to resist uplift loads; and

interlocks on the taller, upstanding seam flanges configured to interlock with an external connector for covering the clip, the internal connector, the inner and outer upstanding seam flanges, and seam between a pair of adjacent glazing panels.

95. (Previously presented) A glazing panel system in accordance with Claim 1 wherein the internal connector is stronger than the external connector with its primary function being to provide strength against hinging and glazing panel separation at high loads; and

the external connector is more flexible than the internal connector with its primary function being to provide a weather-proof covering over the internal connector, the clip and the seam between the glazing panels.